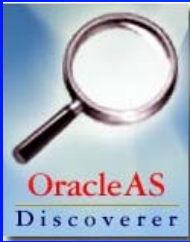


# Discoverer Web for AQS



(This file has been modified to show multiple pages when animation on the page resulted in overlaying of meaningful information.)

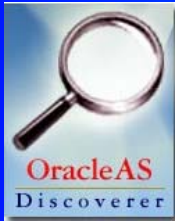
Bonnie Johnson



# Goals for this class

- ◇ Introduce Discoverer Plus
- ◇ Finding the data you need
- ◇ Designing your workbooks
- ◇ Sharing your results
- ◇ Helping yourself





# What is Discoverer?

- ◇ A business intelligence tool for ad hoc queries, reporting, analysis, and Web publishing from Oracle Corporation
- ◇ A retrieval only tool that works on a relational database whether it's designed for online transaction processing (OLAP) or as a data warehouse

# It's the ad hoc query tool for AQS!

How many AQS  
sites are there in  
California?



# It's the ad hoc query tool for AQS!

File Edit Sheet Tools Graph Help




State Code IN ('06')  
09-JUN-05 03:58:20 PM

	StateCountySite	Street Address	City Name	ZIP Code
801	061130001	3RD & B ST, BRODERICK	Broderick-Bryte	
802	061130002	218 "F" ST., DAVIS	Davis	
803	061130003	GOLF COURSE 113/29, DAVIS	Davis	
804	061130004	UC DAVIS-CAMPUS, DAVIS	Davis	
805	061130005	40 SUTTER STREET, WOODLAND, CA 95695	Woodland	
806	061130006	23 RUSSEL BLVD, DAVIS	Davis	
807	061131001	530 5TH ST., DAVIS	Davis	
808	061131002	117 W MAIN ST, WOODLAND	Woodland	
809	061131003	41929 E. GIBSON ROAD, WOODLAND	Woodland	
810	061132001	132 15TH ST., WEST SACRAMENTO	West Sacramento	
811	061133001	COURTHOUSE, WOODLAND	Woodland	
812	061134001	1ST & MAIN, DUNNIGAN	Dunnigan	
813	061150002	CDF, SMARTVILLE RD., SMARTVILLE	Smartville	
814	061151001	MAINTANCE YD., 4TH & "A" STS., WHEATLAND	Wheatland	
815	Count: 814			

Page 9 of 9

100 Rows per Page

Sheet 1



How many active criteria monitors  
are there in Region 9 states?

### Active Criteria Monitors in Region 9

09-JUN-05 06.08.48 PM

	State	Count of Monitors			
		AZ	CA	HI	NV
Parameter Desc					
Carbon Monoxide		24	98	6	18
Lead (Tsp)			39	1	
Nitrogen Dioxide		14	131	2	7
Ozone		53	212	3	26
Pm10 Total 0-10um Stp		70	215	10	31
Pm2.5 - Local Conditions		30	173	6	17
Sulfur Dioxide		9	45	6	1
Suspended Particulate (Tsp)			15		

Discoverer

Microsoft Excel - Active Criteria Mons in Region 9.xls

File Edit View Insert Format Tools Data Window Help Adobe

100% SnagIt

A19 fx

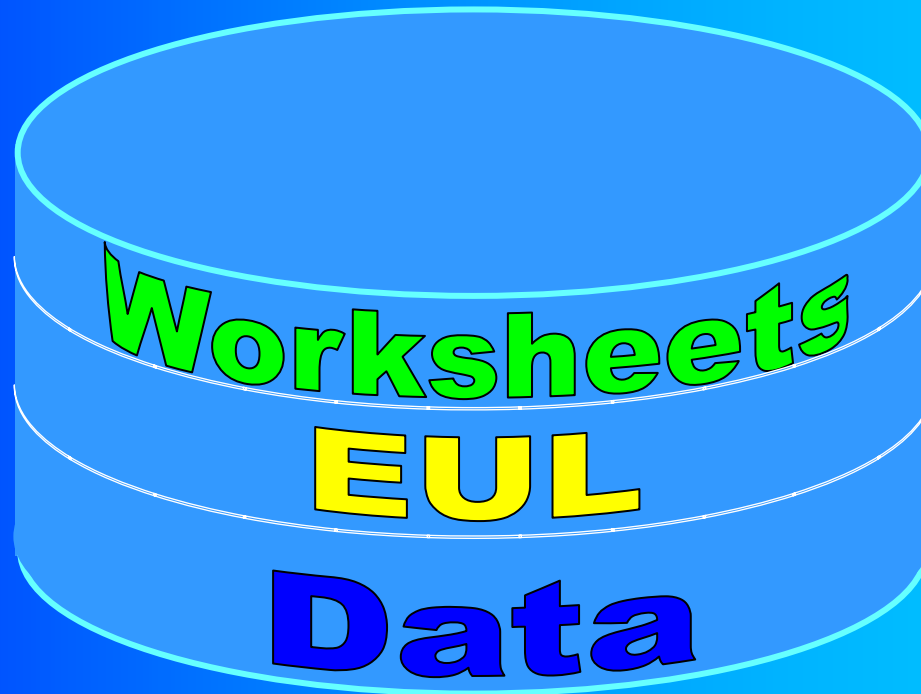
	A	B	C	D	E	F
1	Active Criteria Monitors in Region 9					
2	09-JUN-05 06.11.12 PM					
3						
4			Count of Monitors			
5	Parameter Desc	State	AZ	CA	HI	NV
6	Carbon Monoxide		24	98	6	18
7	Lead (Tsp)			39	1	
8	Nitrogen Dioxide		14	131	2	7
9	Ozone		53	212	3	26
10	Pm10 Total 0-10um Stp		70	215	10	31
11	Pm2.5 - Local Conditions		30	173	6	17
12	Sulfur Dioxide		9	45	6	1
13	Suspended Particulate (Tsp)			15		

Exported to Excel



# How does this work?

**D  
a  
t  
a  
b  
a  
s  
e**



End User Layer



# Key Terminology

Interface to database = End User Layer  
Grouping of Tables = Business Area  
Group of worksheets = Workbook

---

Tables	➡	Folders
Columns	➡	Items
Rows	➡	Records
Queries	➡	Worksheets





# What you need

- ◇ AQS userid and password
- ◇ Java-enabled Web browser
- ◇ Java Virtual Machine (JVM) such as Oracle JInitiator
- ◇ Latest security certificate (pokeCertdb.bat)
- ◇ url:  
<https://iasint.rtpnc.epa.gov/discoverer/plus>



# Starting Discoverer Plus

<https://iasint.rtpnc.epa.gov/discoverer/plus>

The screenshot shows the OracleAS Discoverer Plus web interface. The browser window title is "OracleAS Discoverer - Microsoft Internet Explorer". The address bar shows the URL "https://iasint.rtpnc.epa.gov/discoverer/plus". The page header includes "Oracle Application Server" and "Discoverer Plus". A "Help" link is visible in the top right corner. The main content area is titled "Connect to Discoverer Plus" and contains the text: "To connect to OracleAS Discoverer, click the corresponding Connection in the table below. If the connection you are looking for isn't in the list, click Create Connection." A red arrow points to the "Create Connection" button. Below this is a table with columns "Details", "Connection", "Description", "Update", and "Delete". The "Connection" column contains the text "(No connections found.)".

Oracle Application Server

Discoverer Plus

Help

Connect to Discoverer Plus

To connect to OracleAS Discoverer, click the corresponding Connection in the table below. If the connection you are looking for isn't in the list, click Create Connection.

Create Connection

Details	Connection	Description	Update	Delete
	(No connections found.)			

Help

# Create a Connection

OracleAS Discoverer - Microsoft Internet Explorer

Address: https://iasint.rtpnc.epa.gov/discoverer/plus

## Oracle Application Server Discoverer Plus

[Help](#)

### Create Connection: Connection Details

Enter a connection name that is easy to remember. Add a description for this connection, followed by the database account details.

[Cancel](#) [Apply](#)

#### Connection Name and Description

Connection Name:

Connection Description:

Locale:

#### Database Account Details

User Name:

Password:

Database:

[Cancel](#) [Apply](#)

[Help](#)



# Connection Created

OracleAS Discoverer - Microsoft Internet Explorer

Address: https://iasint.rtpnc.epa.gov/discoverer/plus?

## Oracle Application Server

### Discoverer Plus

Help

#### Connect to Discoverer Plus

To connect to OracleAS Discoverer, click the corresponding Connection in the table below. If the connection you are looking for isn't in the list, click Create Connection.

Create Connection

Details	Connection ▾	Description	Update	Delete
Show	<a href="#">aqsprod</a>	EPA's Air Quality System		

Help

use this  
connection

# Connection Created

OracleAS Discoverer - Microsoft Internet Explorer

Address: [https://iasint.rtpnc.epa.gov/discoverer/plus?&\\_plus=true&cn=us\\_a145&us=%7E27B05%7E27&db=aqspod&lm=discoverer&eul=EUL\\_OWNER&nsl=en-us&\\_plus=true&plusp\\_Locale=en-us](https://iasint.rtpnc.epa.gov/discoverer/plus?&_plus=true&cn=us_a145&us=%7E27B05%7E27&db=aqspod&lm=discoverer&eul=EUL_OWNER&nsl=en-us&_plus=true&plusp_Locale=en-us)

Oracle Application Server  
Discoverer Plus

Help

You are connecting to OracleAS Discoverer

Connection Name: **aqspod**

Language: English (United States)

Password:

Connect

Help

# Successful connection

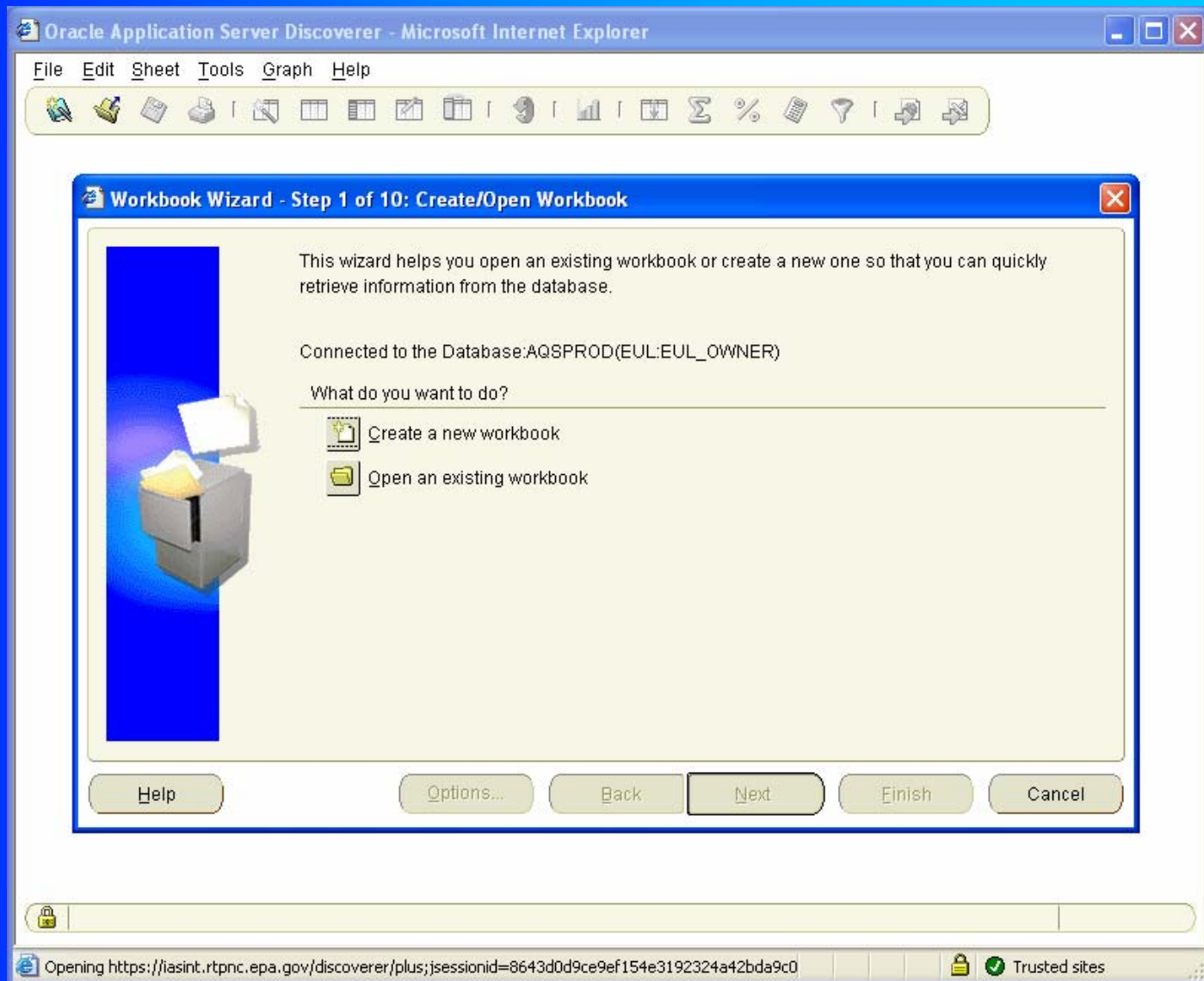
## Oracle Application Server Discoverer Plus

Oracle Application Server 10g

ORACLE®

Copyright © 1999, 2003, Oracle. All rights reserved.

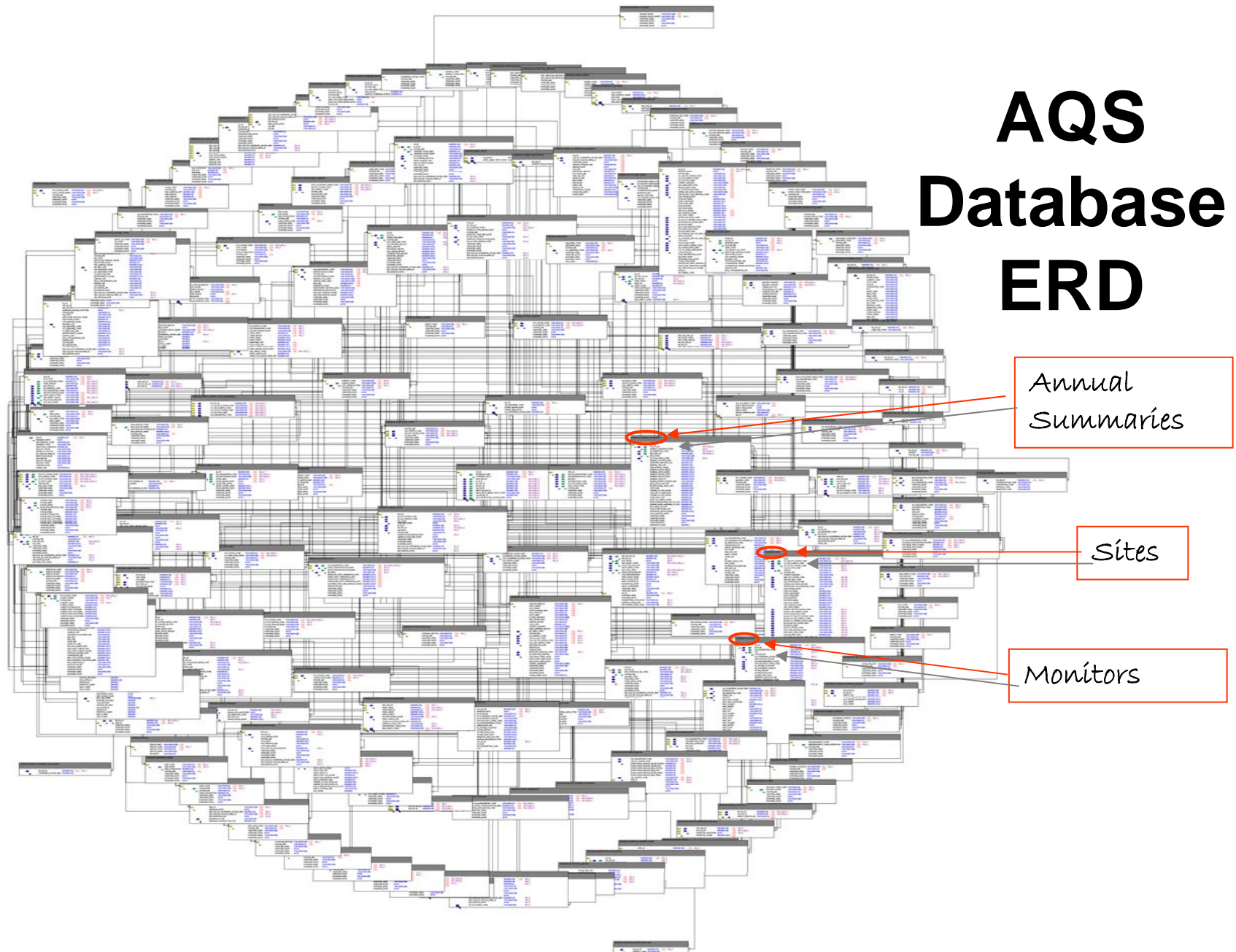
# Successful connection



# Create/Open a Workbook?



# AQS Database ERD



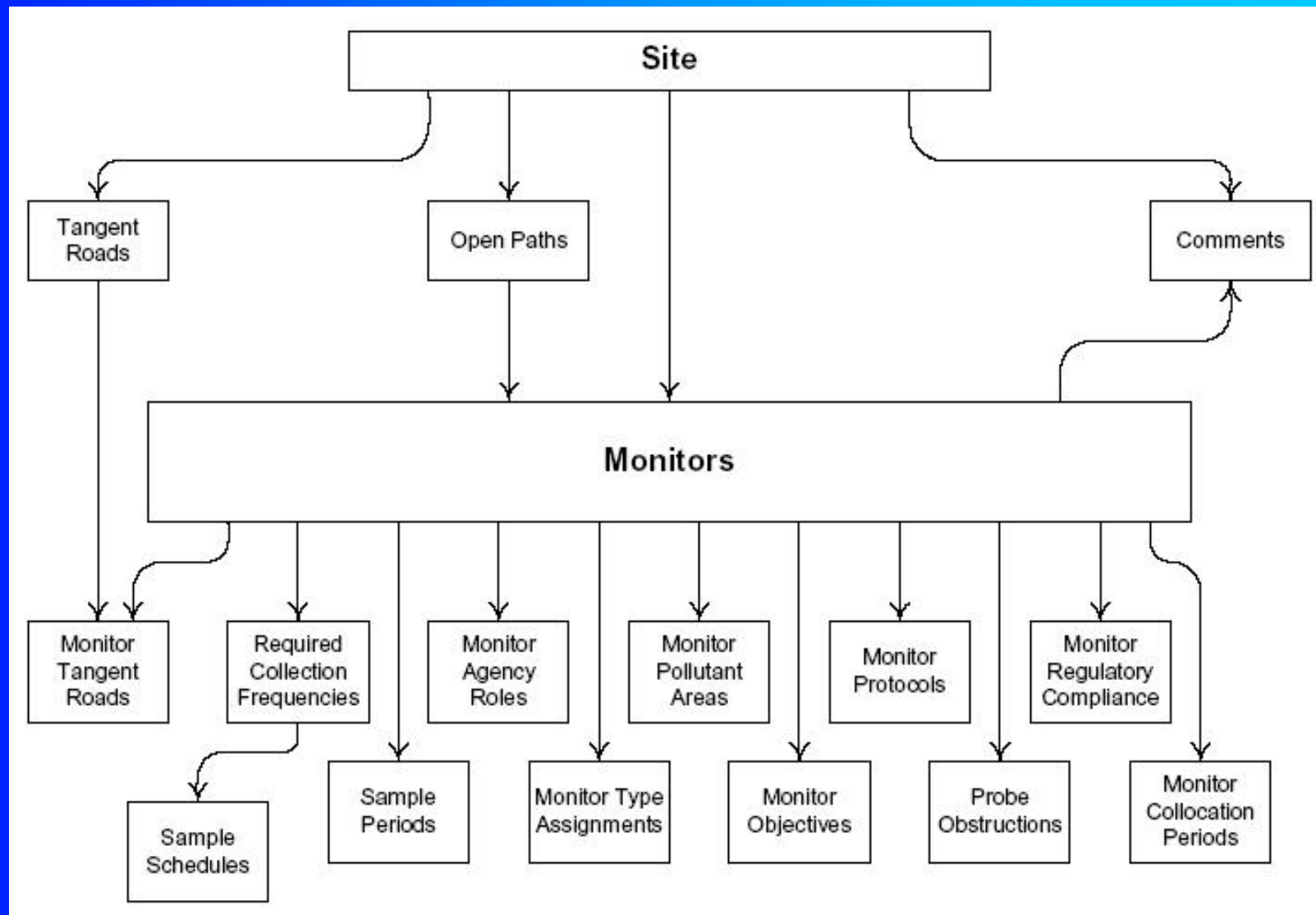
# Your Business Areas

AQS basic

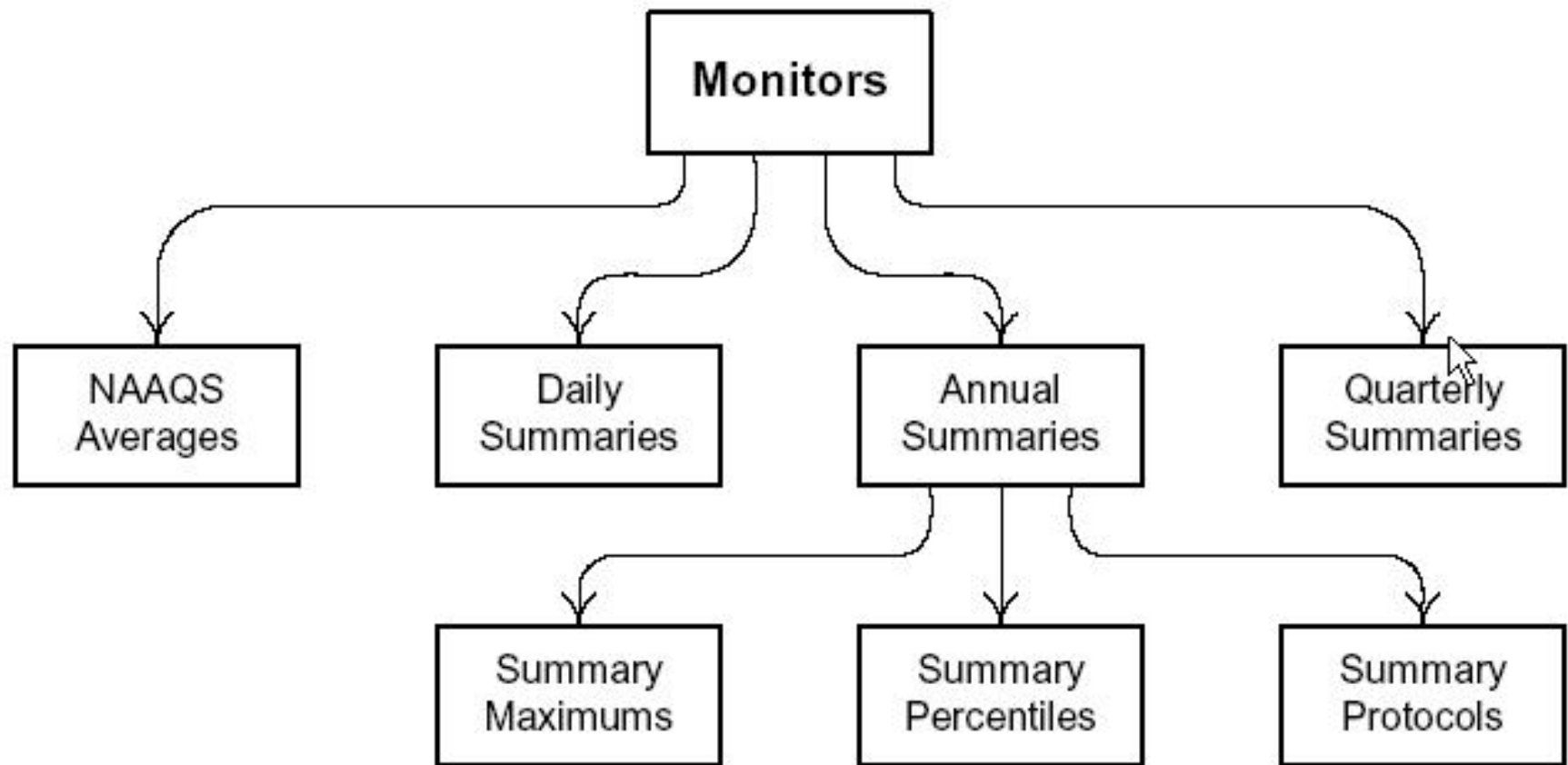
AQSProd 9i

- ◆ Folders are composed primarily of views (i.e., combinations of tables) in the aqsprod database as described in the Data Dictionary
- ◆ Reference tables (e.g., States, Parameters, Units)
- ◆ Raw data and other additional folders in AQSProd 9i

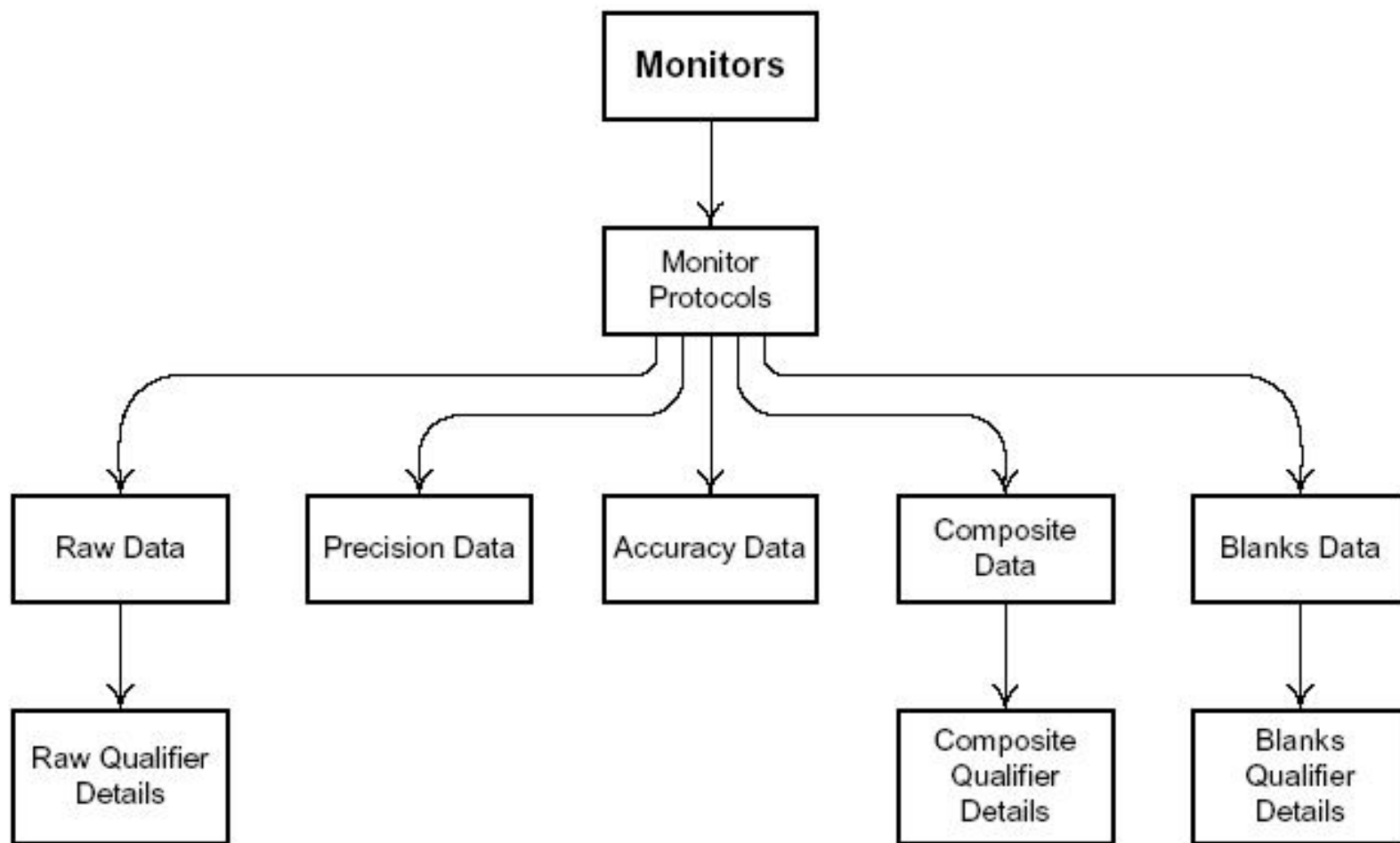
# Data Model for AQS



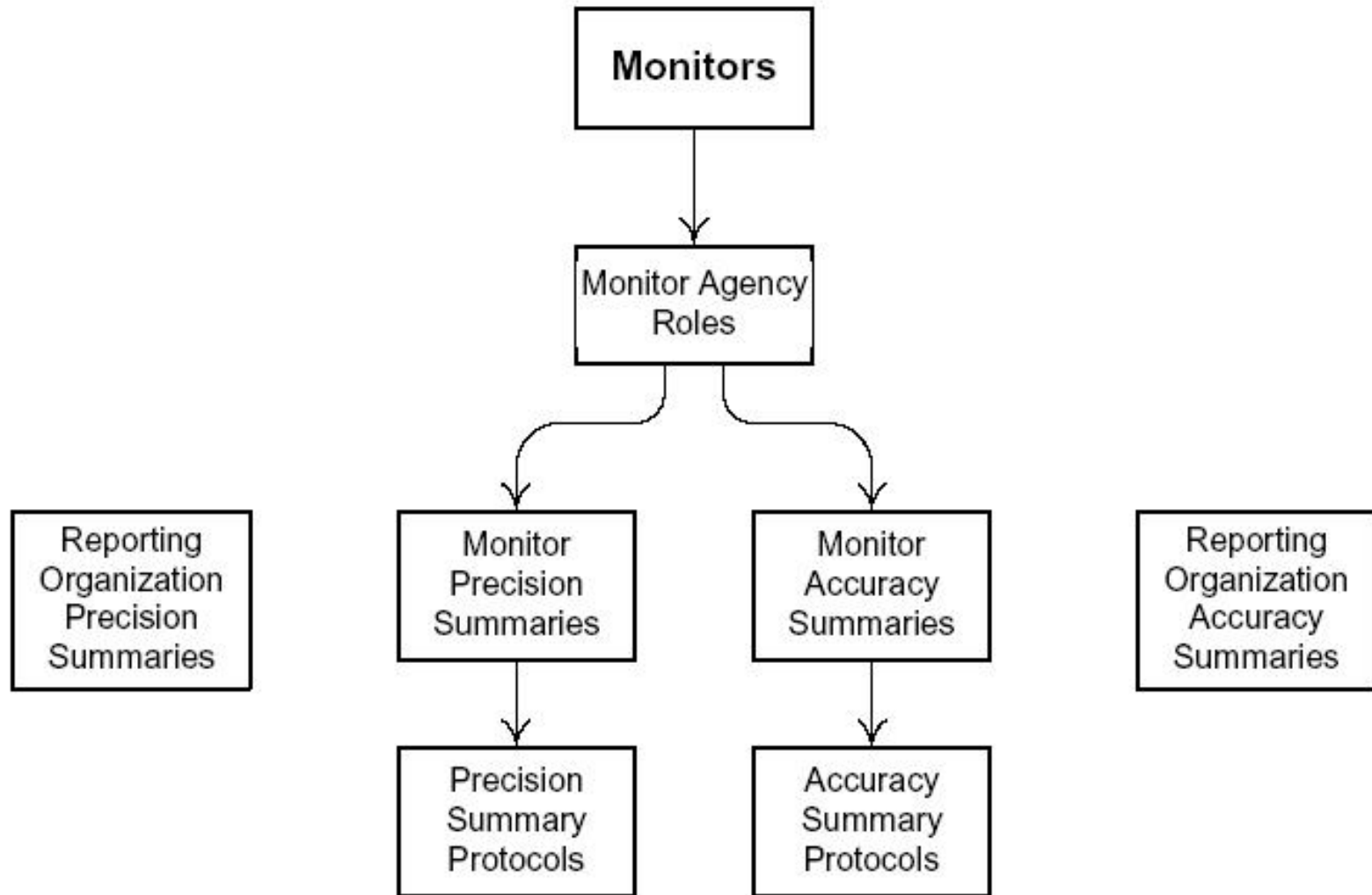
# Data Model for AQS, cont'd



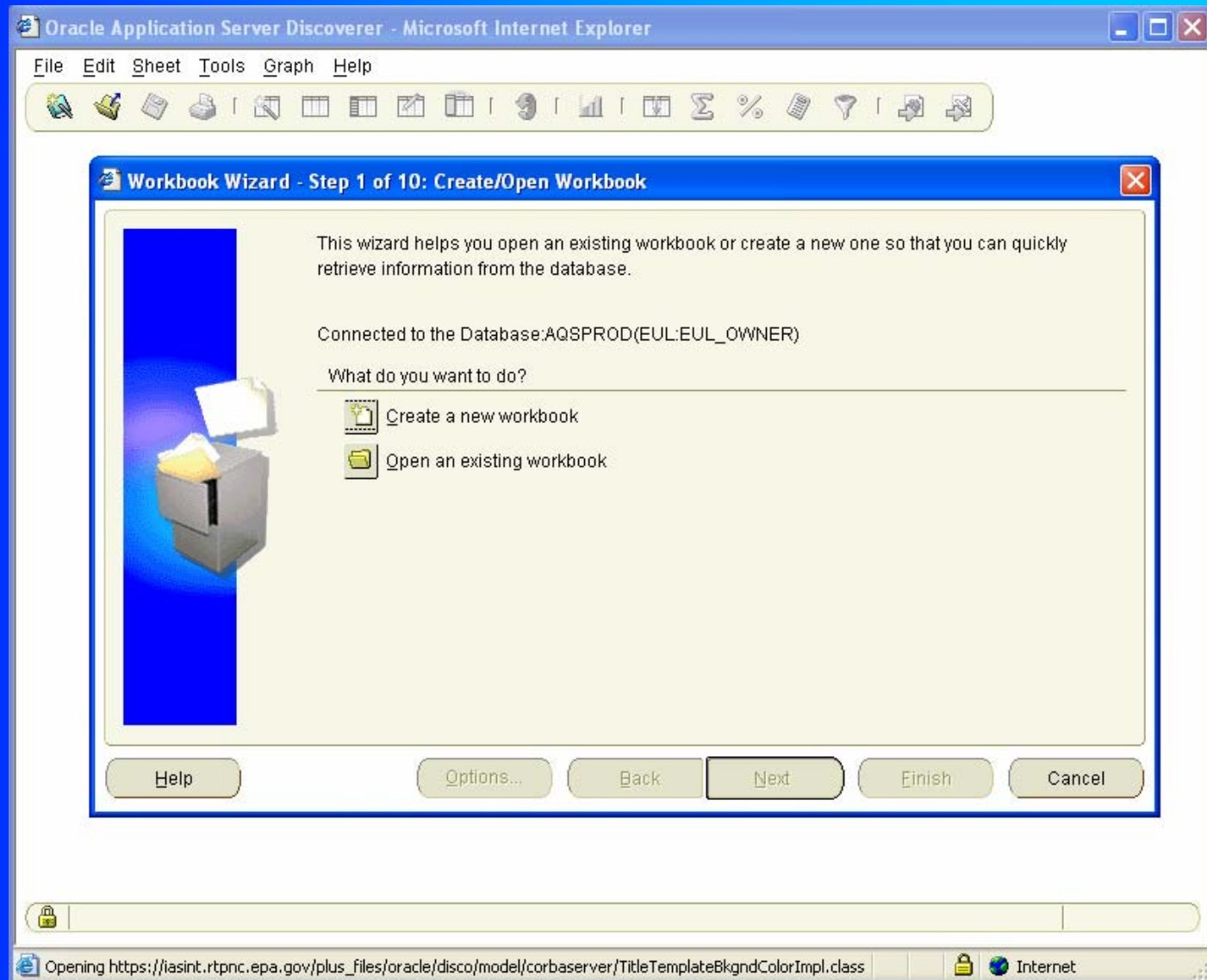
# Data Model for AQS, cont'd



# Data Model for AQS, cont'd



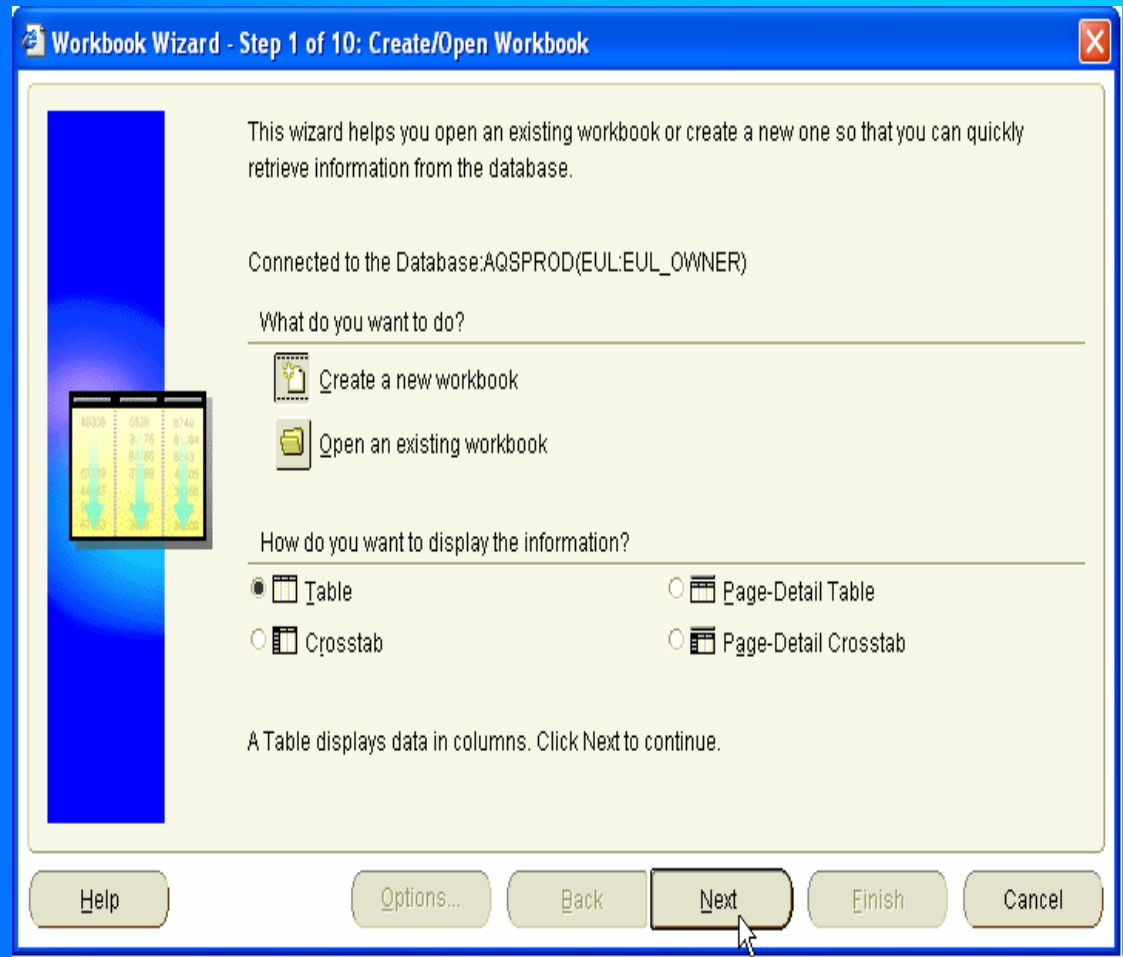
# Create/Open a Workbook





# Creating a New Workbook

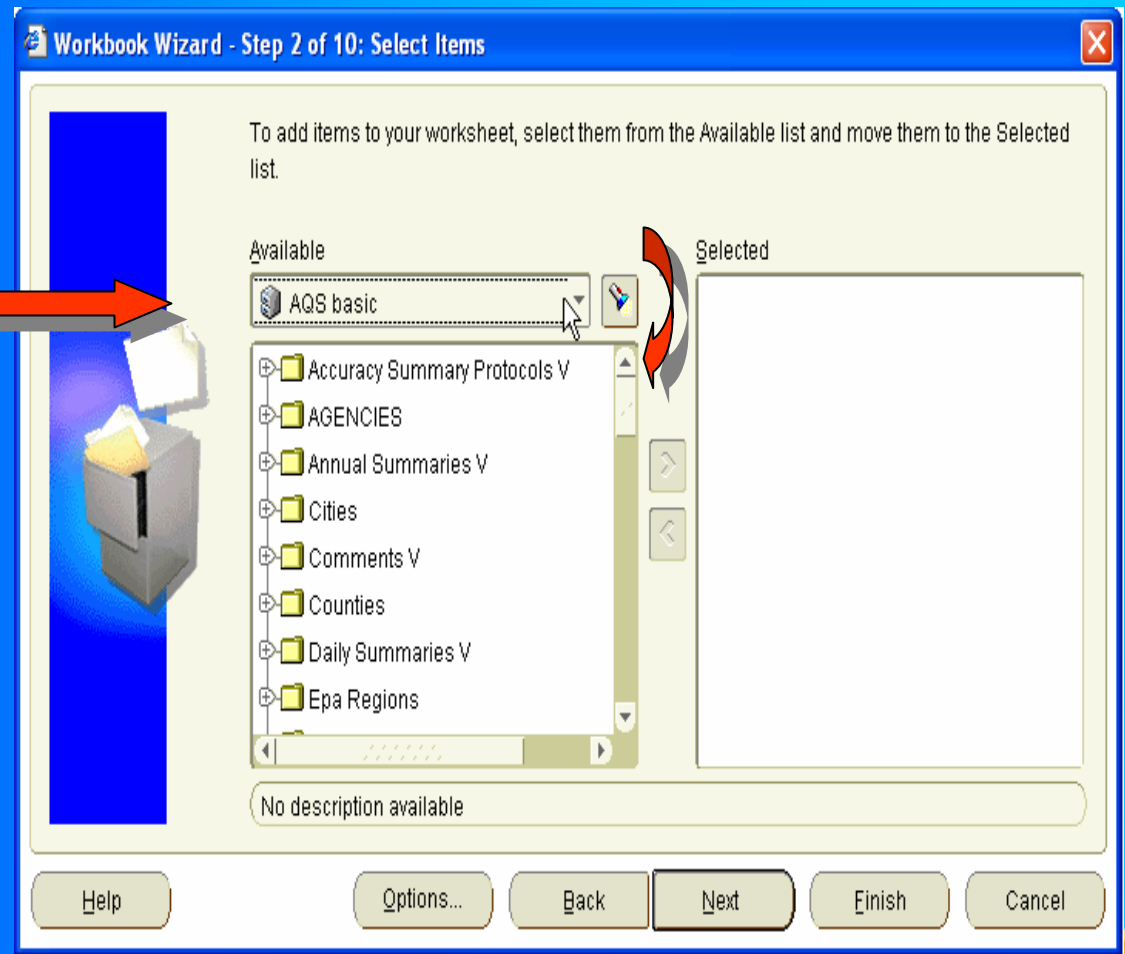
- ◆ Use the Workbook Wizard
- ◆ Start with a simple goal in mind – e.g., Find the states in your region





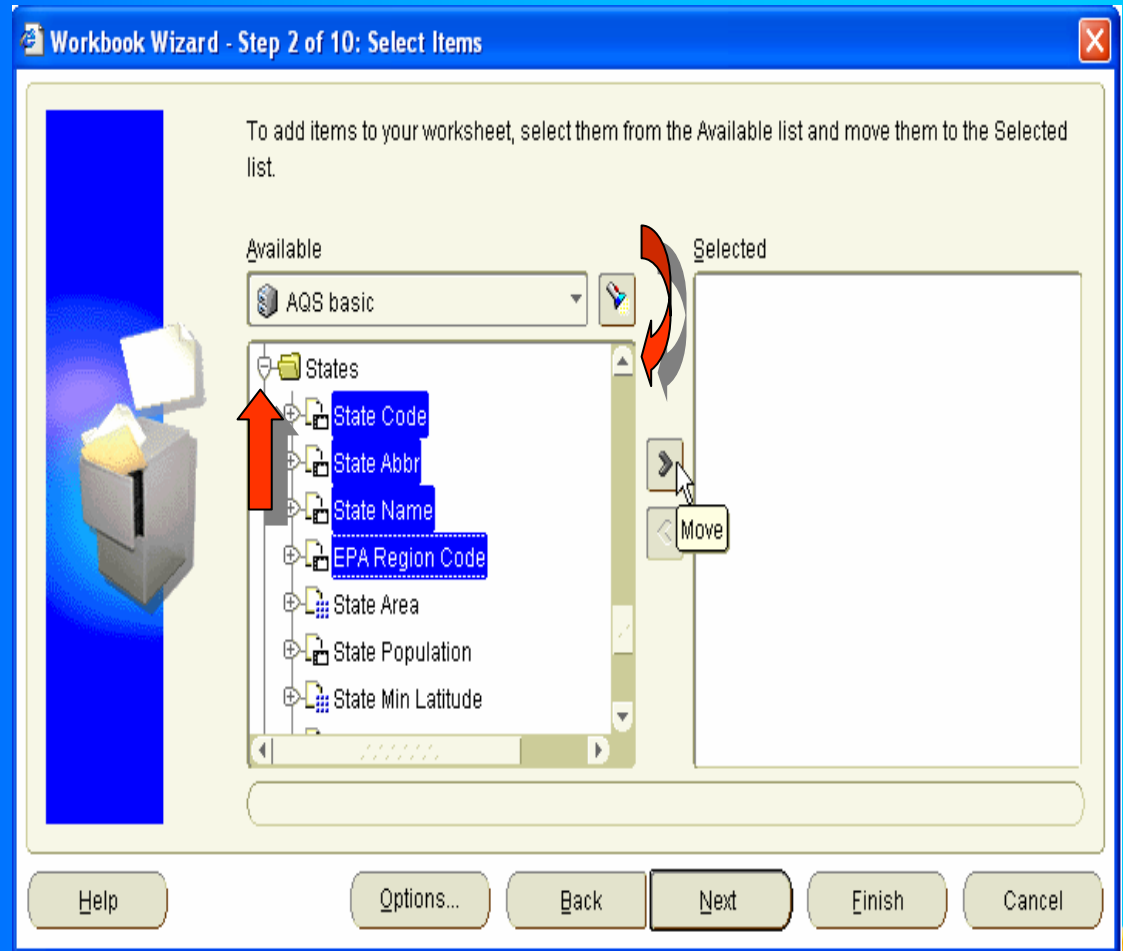
# Selecting Items

- ❖ AQS basic is the simplest Business Area
- ❖ Scroll through list of folders
- ❖ Expand a folder to see its items



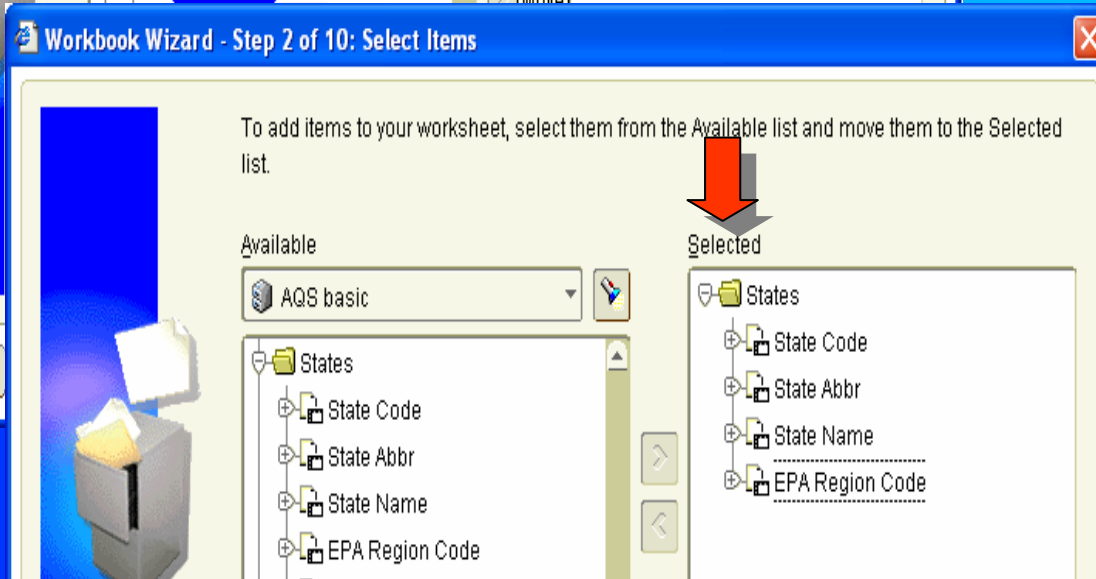
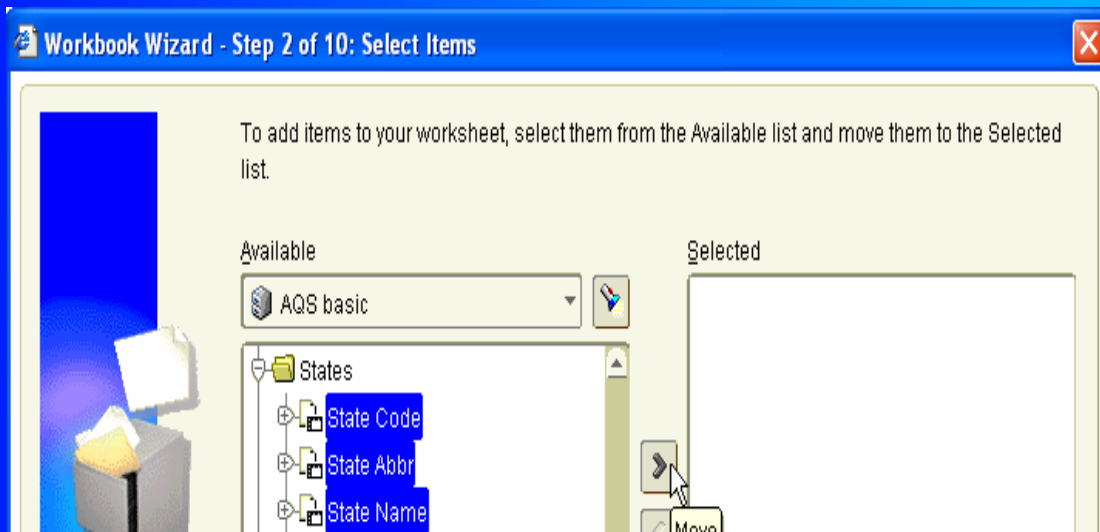
# Selecting Items

- ❖ AQS basic is the simplest Business Area
- ❖ Scroll through list of folders
- ❖ Expand a folder to see its items



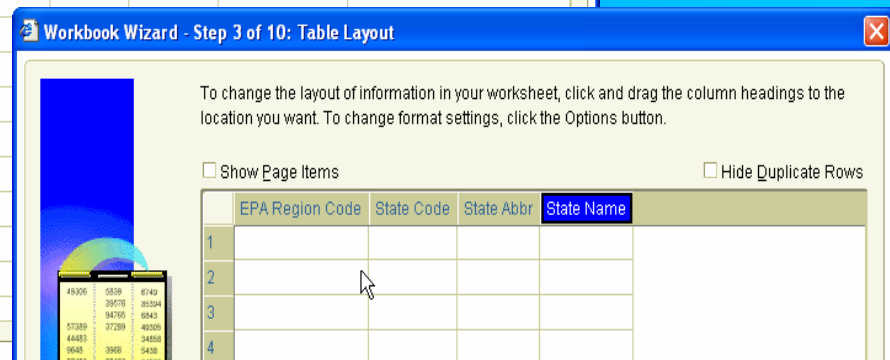
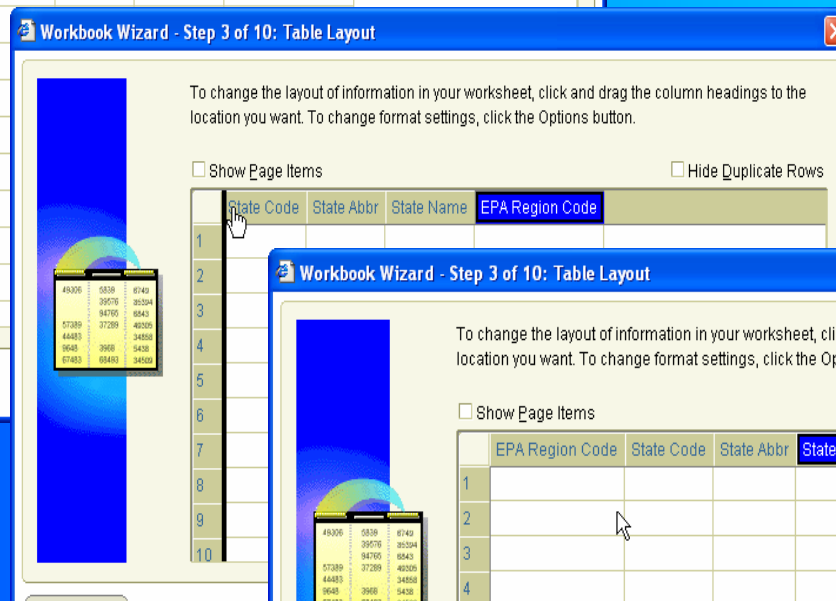
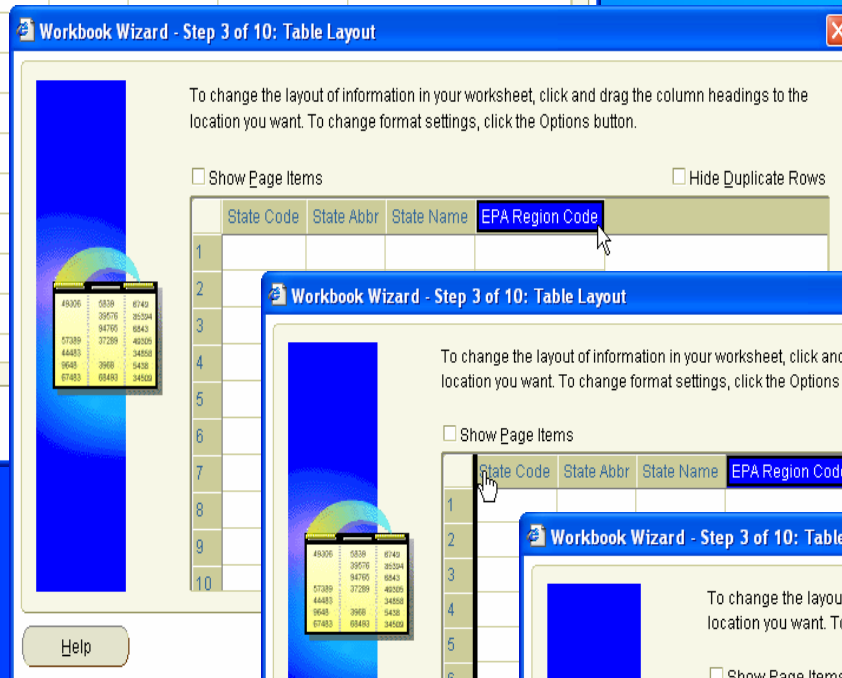
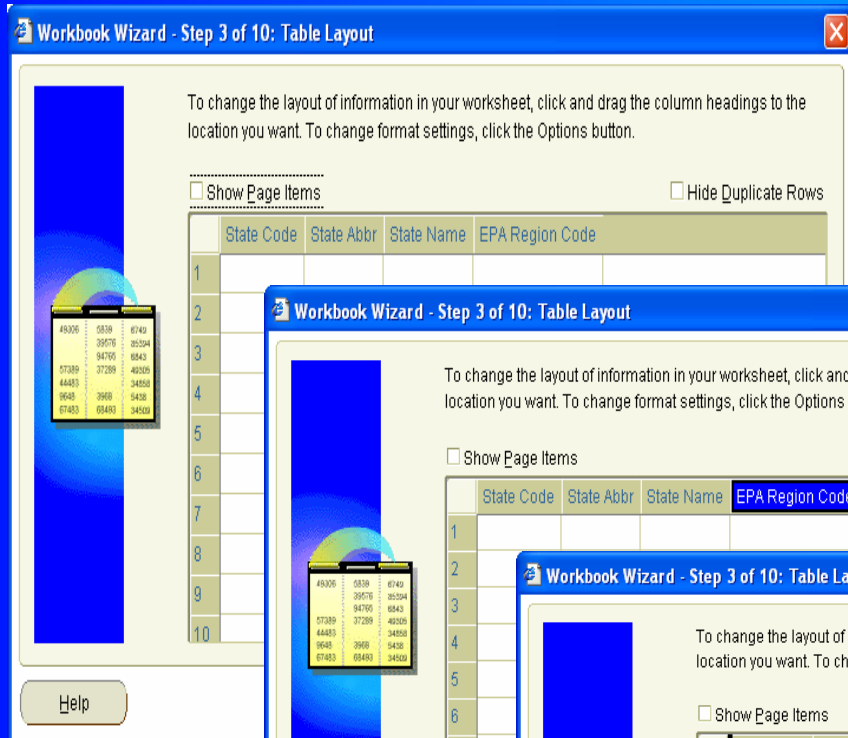
# Selecting Items, cont'd

- ◇ Highlight items and move them to the Selected side

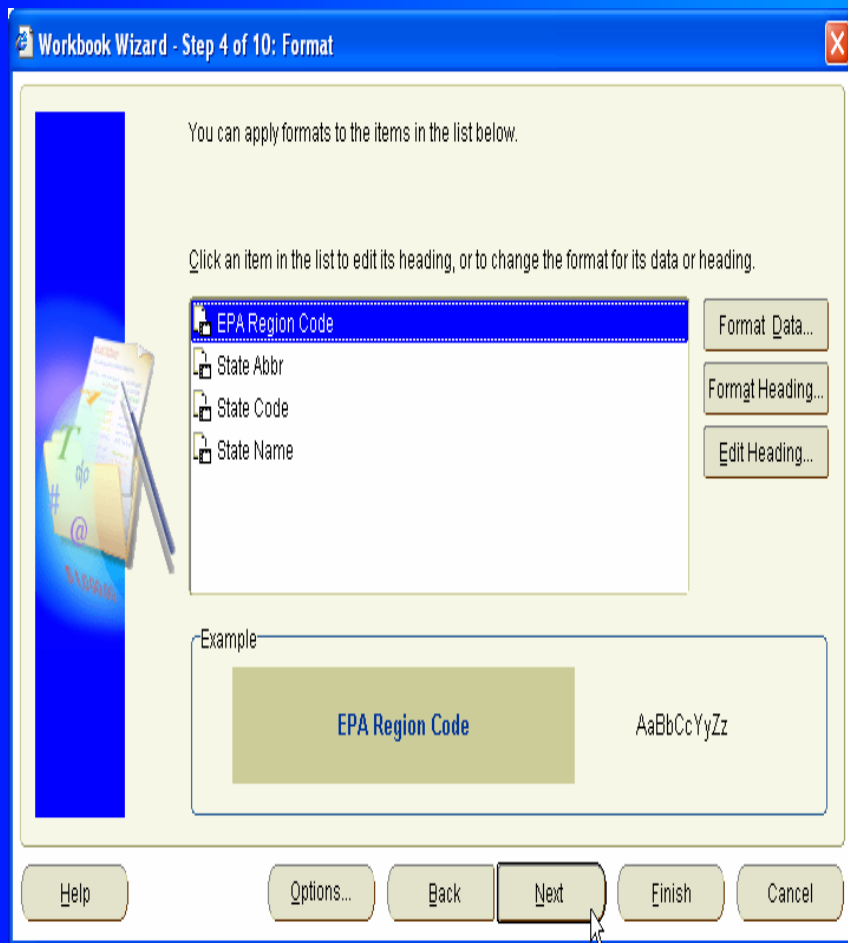


# Table Layout

Click and drag headings  
to desired order



# Formatting



- ◆ Format data and headings for items
- ◆ Edit heading for an item

# Conditions

**Workbook Wizard - Step 5 of 10: Conditions**

Define conditions to limit worksheet results by criteria you specify. Click New to define a new condition.

List conditions for: All Items

Click New to create a new condition.

New... Edit... Show... Delete

**New Condition**

What would you like to name your condition?  
 ☒ Generate name automatically

What description would you like to give your condition?

Formula  
 Type text in single quotes or select a value from the drop-down list. Multiple values must be separated by commas.

Item	Condition	Values
EPA Region Code	=	

☒ Case-sensitive

This condition is located in the workbook 'Workbook'

Advanced >>

Create Calculation...  
 Select Item...  
 New Parameter...  
 Select Multiple Values...  
 • 01  
☐ 02  
☐ 03

**Workbook Wizard - Step 5 of 10: Conditions**

Define conditions to limit worksheet results by criteria you specify. Click New to define a new condition.

List conditions for: All Items

☐ All Items  
☒ Active Only  
☒ EPA Region Code  
☐ State Abbr  
☐ State Code  
☐ State Name

Description

Help Options... Back Next Finish Cancel

**New Condition**

What would you like to name your condition?  
 (EPA Region Code = '01') ☒ Generate name automatically

What description would you like to give your condition?

Formula  
 Type text in single quotes or select a value from the drop-down list. Multiple values must be separated by commas.

Item	Condition	Values
EPA Region Code	=	'01'

☒ Case-sensitive

This condition is located in the workbook 'Workbook 2'.

Help OK Cancel

# Sorts and Calculations

Workbook Wizard - Step 6 of 10: Sort

Click Add and then select a column to sort. Select the Group sort type to hide repeated cell values in a column. Check Hidden to hide a sorted column in the worksheet.

	Column	Direction	Sort Type	Hidden
Sort by	State Abbr	Low to High	Normal	<input type="checkbox"/>

Buttons: Add, Delete, Move Up, Move Down

Help, Options..., Back, Next, Finish, Cancel

Workbook Wizard - Step 7 of 10: Calculations

Create calculations to add new information to your worksheet results. Click New to create a new calculation.

List calculations for: All Items

Click New to create a new calculation.

Description


Buttons: New..., Edit..., Delete


Help, Options..., Back, Next, Finish, Cancel

# Percentages and Totals

Workbook Wizard - Step 8 of 10: Percentages

You can create a percentage based on any data point to further analyze your data. Click New to create a new percentage.

List percentages for:  All Items




Click New to create a new percentage.


Description

Help Options... Back **Next** Finish Cancel

Workbook Wizard - Step 9 of 10: Totals

Summarize your results using functions such as Sum, Average, Count, Minimum, Maximum, Standard Deviation and Variance. Click New to create a new total.

List totals for:  All Items



Click New to create a new total.

Description

Help Options... Back **Next** Finish Cancel



# Parameters and Results

**Workbook Wizard - Step 10 of 10: Parameters**

Create a parameter to prompt users to select or type a value. Click New to create a new parameter. To change the current value of a parameter, select Edit Parameter Values from the Sheet menu.

Available parameters:

Click New to create a new parameter.

Description

New...  
Edit...  
Delete  
Move Up  
Move Down

Help Options... Back Next Finish Cancel

File Edit Sheet Tools Graph Help

Double-click here to edit the title

	EPA Region Code	State Code	State Abbr	State Name
1	01	09	CT	Connecticut
2	01	25	MA	Massachusetts
3	01	23	ME	Maine
4	01	33	NH	New Hampshire
5	01	44	RI	Rhode Island
6	01	50	VT	Vermont

Page 1 of 1 100 Rows per Page

Sheet 1

# Exercise 1

1. Launch a web browser
2. Go to <https://iasint.rtpnc.epa.gov/discoverer/plus>
3. Create your connection and Connect to aqsprod
4. Create a new workbook using the AQS basic business area to show all states within your EPA region
5. Adjust the table layout so that EPA Region is in column 1, State Abbreviation in column 2, State Name in column 3, State Code in column 4
6. Center headings for all columns (Format)
7. Sort by EPA Region, then State Abbreviation. Change to a group sort on EPA Region.
8. Add a title

# Exercise 1: Sample Results

File Edit Sheet Tools Graph Help

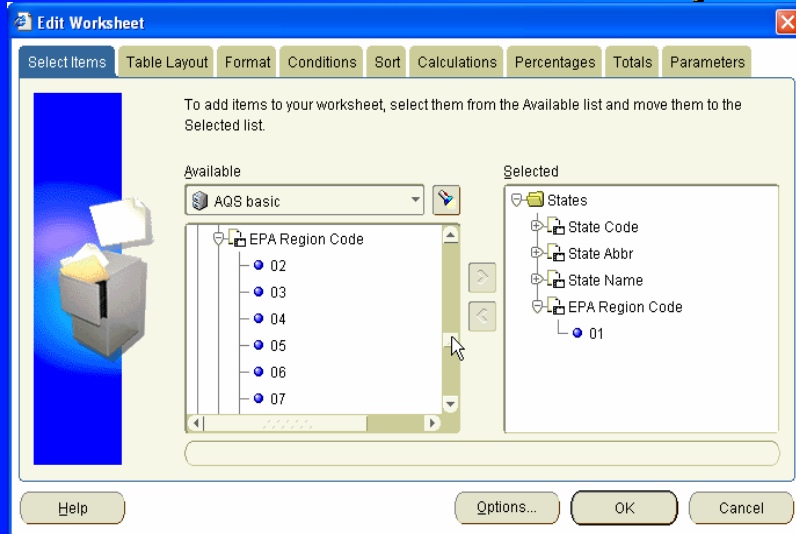
States in EPA Region 1

	EPA Region Code	State Abbr	State Name	State Code
1	01	CT	Connecticut	09
2		MA	Massachusetts	25
3		ME	Maine	23
4		NH	New Hampshire	33
5		RI	Rhode Island	44
6		VT	Vermont	50

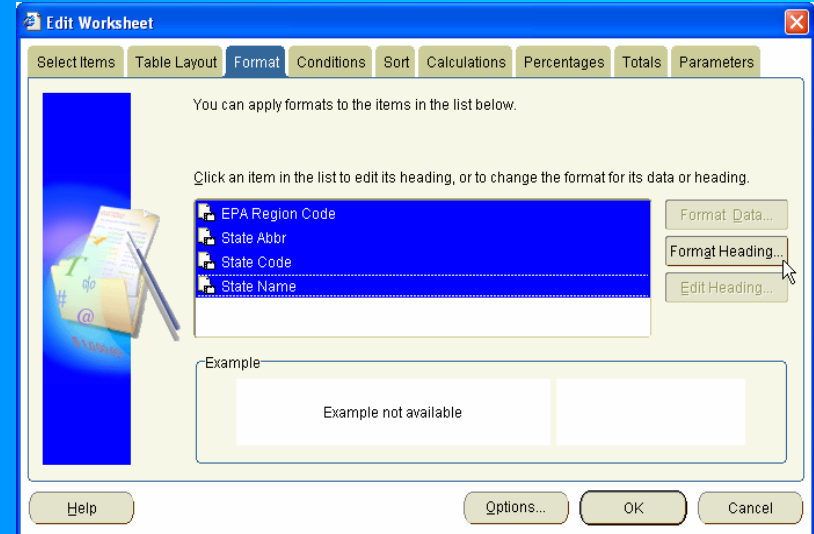
Page 1 of 1 25 Rows per Page

Sheet 1

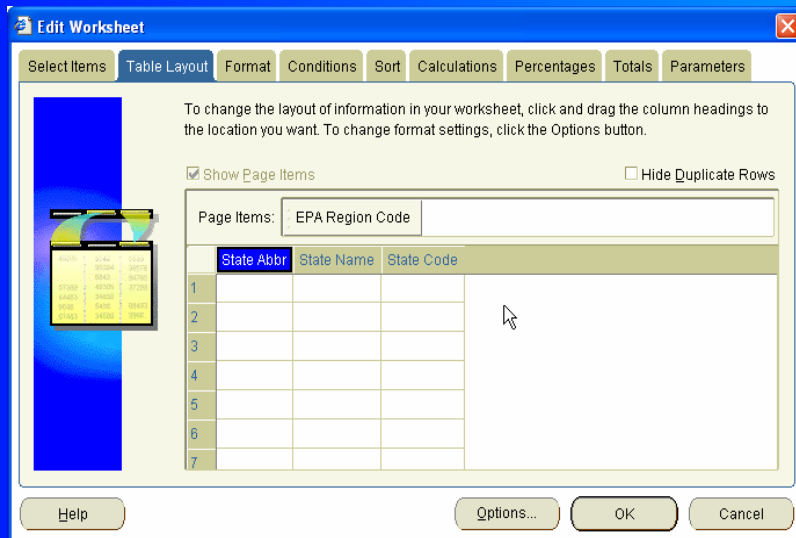
# Did you notice?



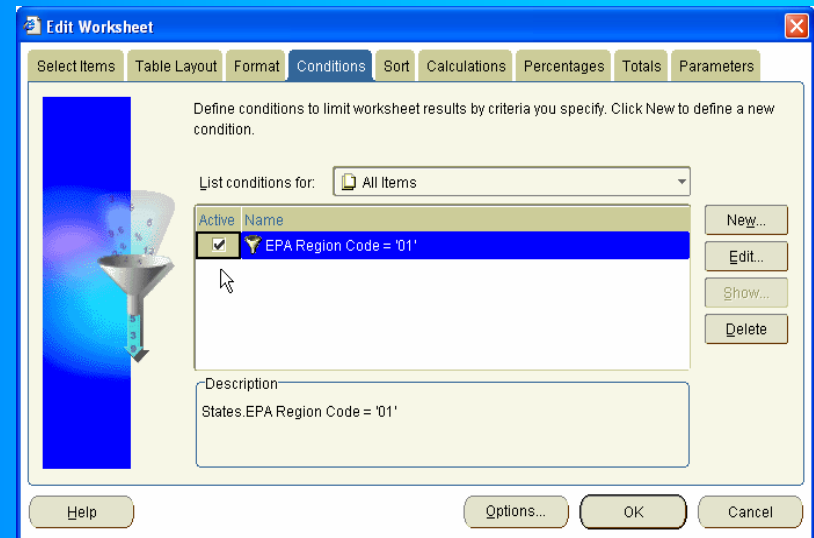
List of values (LOV)



Format multiple headings



Page Items



Conditions may be inactive

# Exercise 2

No Cheating!

1. List all the parameters (pollutants) measured at site 06-001-0007
2. Modify #1 to include only parameters being sampled since 2003
3. Modify #1 to show sampling end dates

## Exercise 2 Results

All parameters at site

	State Code	County Code	Site ID	Parameter Code
1	06	001	0007	42101
2	06	001	0007	42601
3	06	001	0007	42602
4	06	001	0007	43101
5	06	001	0007	43201
6	06	001	0007	44201
7	06	001	0007	68101
8	06	001	0007	68102
9	06	001	0007	68103
10	06	001	0007	68105
11	06	001	0007	68106
12	06	001	0007	68107
13	06	001	0007	68108
14	06	001	0007	68109
15	06	001	0007	81102
16	06	001	0007	81102
17	06	001	0007	82301
18	06	001	0007	82306
19	06	001	0007	82403
20	06	001	0007	85101
21	06	001	0007	68104
22	06	001	0007	82203
23	06	001	0007	88101

All parms since 2003

	State Code	County Code	Site ID	Parameter Code
1	06	001	0007	42101
2	06	001	0007	42601
3	06	001	0007	42602
4	06	001	0007	43101
5	06	001	0007	43201
6	06	001	0007	44201
7	06	001	0007	68101
8	06	001	0007	68102
9	06	001	0007	68103
10	06	001	0007	68105
11	06	001	0007	68106
12	06	001	0007	68107
13	06	001	0007	68108
14	06	001	0007	68109
15	06	001	0007	81102
16	06	001	0007	82301
17	06	001	0007	82306
18	06	001	0007	82403
19	06	001	0007	85101
20	06	001	0007	68104
21	06	001	0007	82203
22	06	001	0007	88101

All parms w/end date

	State Code	County Code	Site ID	Parm Code	Date Sampling Ended
1	06	001	0007	42101	
2	06	001	0007	42601	
3	06	001	0007	42602	
4	06	001	0007	43101	
5	06	001	0007	43201	
6	06	001	0007	44201	
7	06	001	0007	68101	
8	06	001	0007	68102	
9	06	001	0007	68103	
10	06	001	0007	68105	
11	06	001	0007	68106	
12	06	001	0007	68107	
13	06	001	0007	68108	
14	06	001	0007	68109	
15	06	001	0007	81102	31-MAY-2000
16	06	001	0007	81102	
17	06	001	0007	82301	
18	06	001	0007	82306	
19	06	001	0007	82403	
20	06	001	0007	85101	
21	06	001	0007	68104	
22	06	001	0007	82203	
23	06	001	0007	88101	

# Exercise 3

1. List all sites in your state that have been terminated. For each row, show the state code, county code, site ID, date site created and date site terminated.
2. Add a title.
3. Include a count of the number of sites that have been terminated for each county and a grand total at the bottom. (Hint: Use "Totals" under Tools menu or  $\Sigma$ .)

## Exercise 3 sample results

https://iasint.rtpnc.epa.gov - Oracle Application Server Discoverer - [Terminated Sites in NC] - ...

File Edit Sheet Tools Graph Help

Terminated Sites in NC

	State Code	County Code	Site ID	Date Site Established	Date Site Terminated
1	37	001	0001	01-JAN-1971	31-DEC-2000
2			1001	01-JAN-1971	31-JUL-2002
3			Count: 2		
4		003	0001	01-JAN-1972	31-JUL-2002
5			Count: 1		
6		005	0001	01-JAN-1963	31-JUL-2002
7			Count: 1		
8		009	0001	01-JAN-1971	31-JUL-2002
9			Count: 1		
10		011	0001	20-APR-1998	31-JUL-2002
11			Count: 1		
12		013	0002	01-JAN-1980	31-JUL-2002
13			1002	01-JAN-1977	31-JUL-2002
14			0001	01-JAN-1971	31-JUL-2002
15			0150	01-JAN-1980	31-JUL-2002
16			1001	01-JAN-1971	31-JUL-2002

Page 1 of 1 100 Rows per Page

Sheet 1

Opening https://iasint.rtpnc.epa.gov/plus\_files/oracle/disco/image/ Internet





## Other Views –

# Crosstab

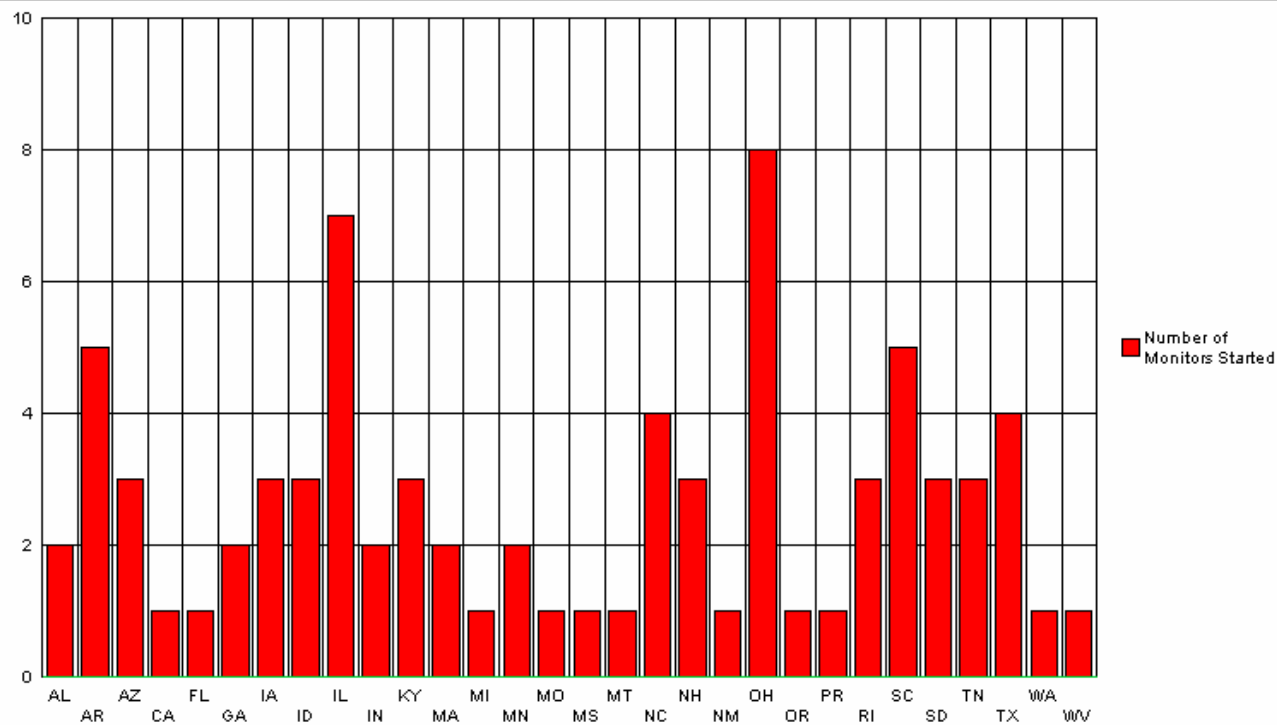
PM 2.5 Monitors with Sampling Periods Beginning in 2005  
As of 11-JUN-05

State Abbr	Number of Monitors Started
AL	2
AR	5
AZ	3
CA	1
FL	1
GA	2
IA	3
ID	3
IL	7
IN	2
KY	3
MA	2
MI	1
MN	2
MO	1
MS	1
MT	1
NC	4
NH	3
NM	1
OH	8

# ...add a graph.

PM 2.5 Monitors with Sampling Periods Beginning in 2005  
As of 11-JUN-05

State Abbr	Number of Monitors Started
AL	2
AR	5
AZ	3
CA	1
FL	1
GA	2
IA	3
ID	3
IL	7
IN	2
KY	3
MA	2
MI	1
MN	2
MO	1
MS	1
MT	1
NC	4



# Output Options - Excel

Microsoft Excel - PM2.5 Monitors started in 2004.xls

File Edit View Insert Format Tools Data Window Help Adobe PDF

Type a question for help

100% Arial 10

PM 2.5 Monitors with Sampling Periods Beginning in 2004 As of 23-SEP-04

	A	B	C	D	E	F	G	H	I	J	K	L
1	PM 2.5 Monitors with Sampling Periods Beginning in 2004 As of 23-SEP-04											
2												
3	State Abbr	State Code	County Code	Site ID	Parameter Code	POC	Date Sampling Began	Date Sampling Ended				
4	AK	02	232	0001	88101	1	03-Feb-2004	-				
5			232	0002	88101	1	05-Jan-2004	-				
6							Count: 2					
7	AL	01	073	1010	88101	1	01-Jan-2004	-				
8			073	1010	88101	2	01-Jan-2004	-				
9			113	0001	88101	2	17-May-2004	-				
10			119	0002	88101	2	31-Mar-2004	-				
11							Count: 4					
12	AZ	04	013	0019	88101	2	01-Jan-2004	-				
13			013	0019	88101	5	22-Mar-2004	-				
14			013	8005	88101	3	01-Jan-2004	02-Jan-2004				
15							Count: 3					
16	CA	06	021	0002	88101	3	03-Jun-2004	-				
17			051	0001	88101	1	19-Mar-2004	-				
18			061	0006	88101	3	23-Jun-2004	-				
19			067	0010	88101	3	18-May-2004	-				
20			067	0010	88101	4	18-May-2004	-				
21			073	2004	88101	1	04-Jan-2004	-				
22			073	2004	88101	2	04-Jan-2004	-				
23			101	0003	88101	3	14-Jun-2004	-				
24							Count: 8					
25	CO	08	035	0004	88101	1	29-May-2004	30-May-2004				
26			035	0004	88101	3	29-May-2004	-				
27			077	0017	88101	2	01-Jan-2004	-				
28							Count: 3					
29	CT	09	001	0010	88101	3	05-Jan-2004	-				
30			003	2006	88101	3	17-May-2004	-				
31			009	0027	88101	1	01-Jan-2004	-				
32			009	0027	88101	3	09-Mar-2004	-				
33			009	0027	88101	5	24-Feb-2004	-				
34							Count: 5					
35	FL	12	031	0098	88101	3	01-Jan-2004	-				

Sheet 1

Ready NUM



# Output Options – HTML

PM2.5 Monitors started in 2004 Sheet 1 - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Mail Print Send To Favorites

Address C:\Documents and Settings\bjohnso1\PM2.5 Monitors started in 2004.htm Go Links SnagIt

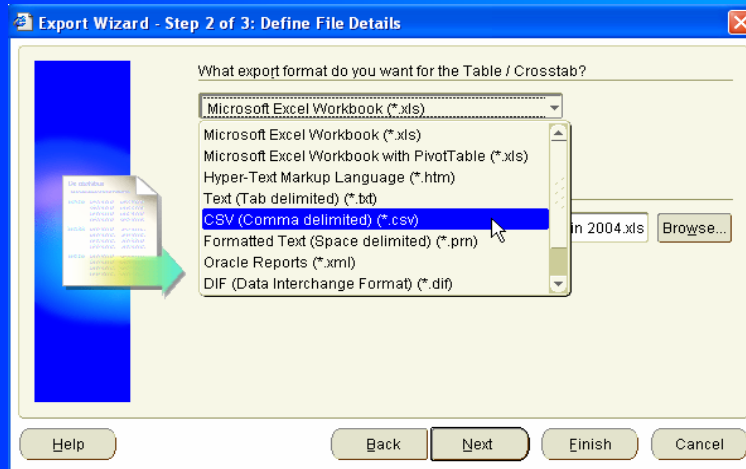
**PM 2.5 Monitors with Sampling Periods Beginning in 2004  
As of 23-SEP-04**

	State Abbr	State Code	County Code	Site ID	Parameter Code	POC	Date Sampling Began	Date Sampling Ended
1	AK	02	232	0001	88101	1	03-FEB-2004	-
2			232	0002	88101	1	05-JAN-2004	-
3							Count: 2	
4	AL	01	073	1010	88101	1	01-JAN-2004	-
5			073	1010	88101	2	01-JAN-2004	-
6			113	0001	88101	2	17-MAY-2004	-
7			119	0002	88101	2	31-MAR-2004	-
8							Count: 4	
9	AZ	04	013	0019	88101	2	01-JAN-2004	-
10			013	0019	88101	5	22-MAR-2004	-
11			013	8005	88101	3	01-JAN-2004	02-JAN-2004
12							Count: 3	
13	CA	06	021	0002	88101	3	03-JUN-2004	-
14			051	0001	88101	1	19-MAR-2004	-
15			061	0006	88101	3	23-JUN-2004	-
16			067	0010	88101	3	18-MAY-2004	-
17			067	0010	88101	4	18-MAY-2004	-
18			073	2004	88101	1	04-JAN-2004	-
19			073	2004	88101	2	04-JAN-2004	-
20			101	0003	88101	3	14-JUN-2004	-
21							Count: 8	
22	CO	08	035	0004	88101	1	29-MAY-2004	30-MAY-2004
23			035	0004	88101	3	29-MAY-2004	-
24			077	0017	88101	2	01-JAN-2004	-
25							Count: 3	
26	CT	09	001	0010	88101	3	05-JAN-2004	-

Done My Computer



# Other Output Options



# Using More Features

## Goal:

1. Find all PM 2.5 monitors with sampling periods beginning in 2005
2. Sort the results by state abbreviation, county, site, and POC
3. Display start date and end date (if any) for sampling periods
4. Display count of monitors in each state.
5. Add an appropriate title
6. Save the workbook on the database
7. Share your workbook with your neighbor



# Desired Results

PM 2.5 Monitors with Sampling Periods Beginning in 2005 As of 11-JUN-05								
	State Abbr	State Code	County Code	Site ID	Parameter Code	POC	Date Sampling Began	Date Sampling Ended
1	AL	01	069	0003	88101	1	07-JAN-2005	
2			073	0023	88101	4	01-MAR-2005	
3							Count: 2	
4	AR	05	035	0005	88101	1	01-JAN-2005	
5			035	0005	88101	3	01-JAN-2005	
6			119	1005	88101	3	01-JAN-2005	
7			139	0006	88101	3	01-JAN-2005	
8			143	0004	88101	3	01-JAN-2005	
9							Count: 5	
10	AZ	04	013	4003	88101	1	01-JAN-2005	
11			013	7003	88101	5	03-FEB-2005	
12			013	7020	88101	5	03-FEB-2005	
13							Count: 3	
14	CA	06	093	2001	88101	1	28-MAY-2005	
15							Count: 1	
16	FL	12	021	0004	88101	3	03-MAR-2005	
17							Count: 1	
18	GA	13	059	0002	88101	1	12-FEB-2005	
19			297	0001	88101	3	01-MAR-2005	
20							Count: 2	
21	IA	19	045	0021	88101	3	12-JAN-2005	

# Live Demo . . . . .

**Post presentation note:**

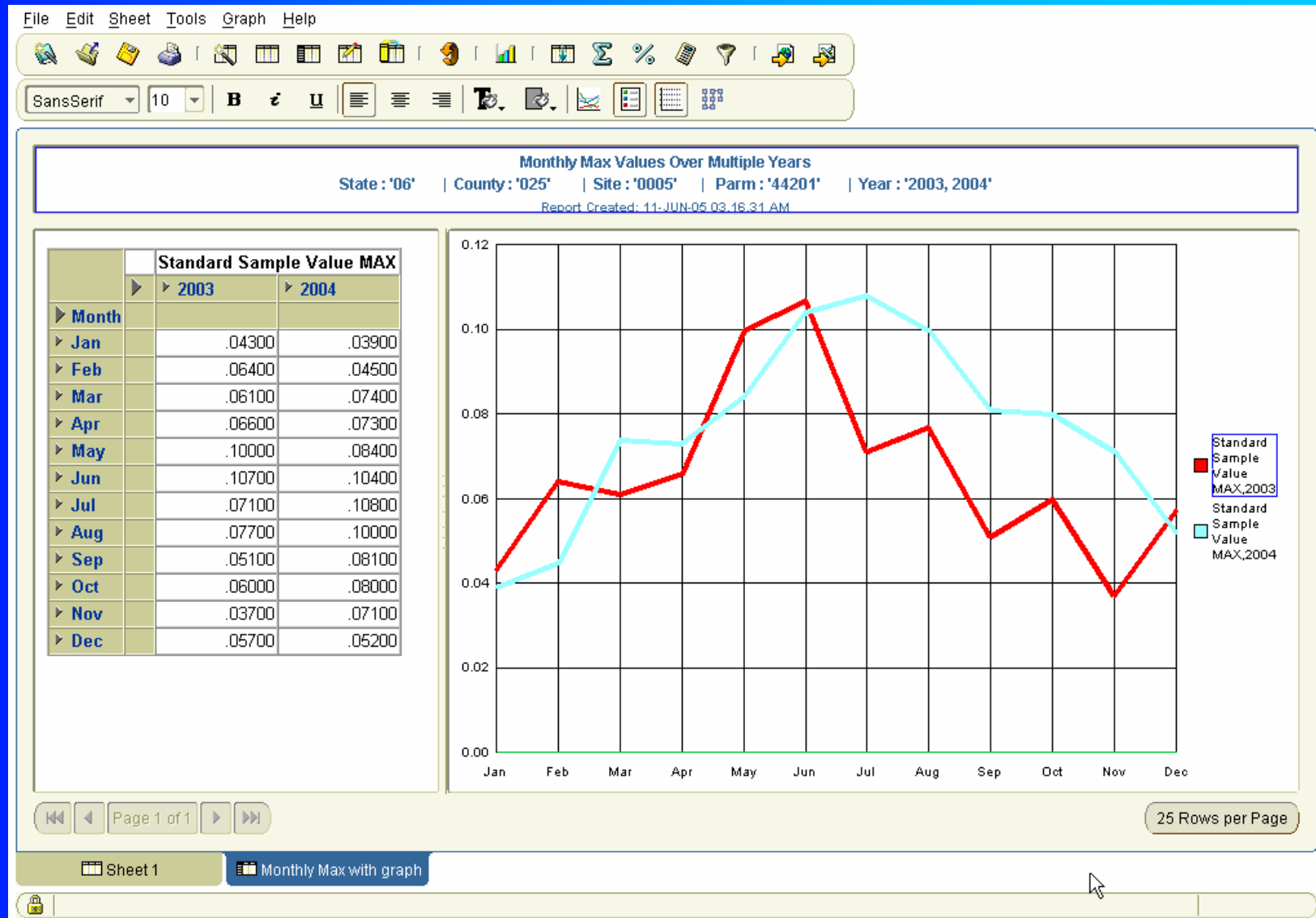
**During conference session, the worksheet showing the “desired results” on the previous page was shown.**

**Then the worksheets shown in the next 4 pages were shown.**

**All of these workbooks have been shared with all users. Look for them with names beginning with “BOS”. Users can use them as they are, or edit them and save them under their own userid.**



# Monthly Max Values with Graph

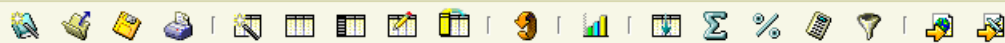


# Sample Monthly Max, Min, Mean by Monitor

Monthly Max, Min and Arithmetic Mean Values									
State : '06'   County : '025'   Site : '0005'   Parm : '44201'   Year : '2003, 2004'									
Report Created: 11-JUN-05 02:56:09 AM									
Monitor ID	Month	Standard Sample Value MAX		Standard Sample Value MIN		Standard Sample Value Arith Mean		Number of Obs	
		2003	2004	2003	2004	2003	2004	2003	2004
06-025-0005-44201-1		.10700	.10800	.00200	.00200	.01954	.02519	8309	8326
	Jan	.04300	.03900	.00200	.00200	.01067	.01174	682	707
	Feb	.06400	.04500	.00200	.00200	.01769	.01846	659	659
	Mar	.06100	.07400	.00200	.00200	.02194	.02528	712	700
	Apr	.06600	.07300	.00200	.00200	.03203	.03770	687	680
	May	.10000	.08400	.00200	.00200	.03198	.03358	712	696
	Jun	.10700	.10400	.00200	.00200	.02840	.02790	682	682
	Jul	.07100	.10800	.00200	.00200	.02381	.02680	709	727
	Aug	.07700	.10000	.00200	.00200	.01918	.02471	695	710
	Sep	.05100	.08100	.00200	.00200	.01468	.02766	680	682
	Oct	.06000	.08000	.00200	.00200	.01227	.02683	703	703
	Nov	.03700	.07100	.00200	.00200	.01022	.02358	683	677
	Dec	.05700	.05200	.00200	.00200	.01116	.01816	705	703

# Sample Quarterly Max, Min, Mean

File Edit Sheet Tools Graph Help



Quarterly Max, Min and Arithmetic Mean Values  
State : '06' | County : '025' | Parm : '44201' | Year : '2004'

Report Created: 11-JUN-05 02:33:16 AM

		Yr	2004															
		Q	Q1				Q2				Q3				Q4			
			Std Sample Value MAX	Std Sample Value MIN	Std Sample Value AVG	Number of Obs	Std Sample Value MAX	Std Sample Value MIN	Std Sample Value AVG	Number of Obs	Std Sample Value MAX	Std Sample Value MIN	Std Sample Value AVG	Number of Obs	Std Sample Value MAX	Std Sample Value MIN	Std Sample Value AVG	Number of Obs
Scrng Grp	Monitor ID																	
CALIFORNIA 2			.07400	.00200	.02050	4126	.12400	.00200	.03766	4122	.10800	.00200	.02892	4212	.08000	.00200	.02262	4143
	06-025-0005-44201-1		.07400	.00200	.01847	2066	.10400	.00200	.03306	2058	.10800	.00200	.02638	2119	.08000	.00200	.02285	2083
	06-025-0006-44201-1		.06500	.00200	.02253	2060	.12400	.00600	.04225	2064	.09300	.00600	.03149	2093	.06500	.00200	.02238	2060
CALIFORNIA 3			.08700	.00200	.02274	8250	.10900	.00200	.04090	8322	.10600	.00200	.02997	8364	.08700	.00200	.02027	7829
	06-025-0004-44201-1		.06900	.00200	.01803	2041	.10500	.00200	.03020	2089	.09400	.00200	.01934	2116	.06000	.00200	.01078	2108
	06-025-1003-44201-1		.08700	.00200	.02203	2033	.09000	.00200	.04657	2056	.09600	.00200	.03697	2050	.08700	.00200	.02657	2074
	06-025-4003-44201-1		.07700	.00200	.01646	2089	.10900	.00200	.04076	2091	.10600	.00200	.03140	2096	.08300	.00200	.02273	1581
	06-025-4004-44201-1		.07900	.00700	.03433	2087	.09200	.00200	.04615	2086	.08300	.00200	.03241	2102	.08100	.00200	.02175	2066

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Sheet 1

Qtrly Max, Min, Avg by Monitor ID

# Sample Quarterly Completeness Report

File Edit Sheet Tools Graph Help



Quarterly Completeness Report

Summary Year(s) : '2004' | State(s) : '06' | Parameter(s) : '44201'

Exceptional Data Types: 0.5

Page Items: Summary Year (Quarterly): 2004 Parameter Desc: Ozone State Abbr: CA State Code: 06

County	Site ID	Site Address	Supporting Agency	POC	Dur Cde	1Q 2004					2Q 2004					3Q 2004					4Q 2004					
						Arith Mean	Cnt of Obs	% of Obs	Sum Crit Ind	Exopt Data Type	Arith Mean	Cnt of Obs	% of Obs	Sum Crit Ind	Exopt Data Type	Arith Mean	Cnt of Obs	% of Obs	Sum Crit Ind	Exopt Data Type	Arith Mean	Cnt of Obs	% of Obs	Sum Crit Ind	Exopt Data Type	
001 Alameda	0005	822 ALICE ST., OAKLAND , Oakland	0086 - Bay Area Air Quality Management District	1	1						0.02	2167	100	Y	0	0.01	2187	100	Y	0	0.01	1433	66	N	0	
					W	0.02	2	0	N	0	0.02	2184	100	Y	0	0.01	2201	100	Y	0	0.01	1459	66	N	0	
	0006	HOSPITAL-15400 FOOTHILL BLYD, SAN LEANDRO , San Leandro	0086 - Bay Area Air Quality Management District	1	1						0.03	2163	100	Y	0	0.02	2136	96	Y	0	0.02	1431	66	N	0	
					W	0.03	2	0	N	0	0.03	2176	100	Y	0	0.02	2144	96	Y	0	0.02	1453	66	N	0	
	0007	793 RINCON AVE., LIVERMORE , Livermore	0086 - Bay Area Air Quality Management District	1	1	0.02	2011	97	Y	0	0.03	2048	98	Y	0	0.02	2094	98	Y	0	0.02	2072	95	Y	0	
					W	0.02	2096	97	Y	0	0.03	2138	98	Y	0	0.02	2181	98	Y	0	0.02	2140	95	Y	0	
	1001	40733 CHAPEL WAY., FREMONT , Fremont (Centerville)	0086 - Bay Area Air Quality Management District	1	1	0.02	2088	99	Y	0	0.03	2083	99	Y	0	0.02	1987	95	Y	0	0.02	2042	96	Y	0	
					W	0.02	2175	99	Y	0	0.03	2167	99	Y	0	0.02	2068	95	Y	0	0.01	2125	96	Y	0	
	2001	3466 LA MESA DR., HAYWARD , Hayward	0086 - Bay Area Air Quality	1	1							0.03	2160	100	Y	0	0.03	2185	100	Y	0	0.03	1420	66	N	0
					W	0.03	2	0	N	0	0.03	2176	100	Y	0	0.03	2202	100	Y	0	0.02	1436	66	N	0	

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25 Rows per Page

Sheet 1

Qrtly Completeness Crosstab

# Hints and Tips and Other Good Stuff

- ◇ AQSprod is the database instance name
- ◇ Discoverer is accessing the live production database (AQSprod – same as the AQS application)
- ◇ Your Discoverer userid and password are the same as your AQS application userid and password
- ◇ Only registered AQS users can access **AQSprod** via Discoverer
- ◇ If you delete your cookies, you'll have to recreate your connection
- ◇ Your Connection must be created on each different PC you use
- ◇ There is one EUL for AQS; multiple Business Areas
  - **AQS basic** has the most commonly used tables
  - **AQSprod 9i** includes all the tables in **AQS basic** plus raw data – current and a few other related tables
- ◇ Online Help is pretty good!
- ◇ Any workbook you share with others will have your userid appended to the beginning of the workbook name
- ◇ You can get to Discoverer from the AQS Web Application link on the EPA TTN AQS page – <http://www.epa.gov/ttn/airs/airsaqs/>
- ◇ You can find answers to some of the Frequently Asked Questions from a link on the same page
- ◇ Many of the reference tables are viewable from <http://www.epa.gov/ttn/airs/airsaqs/manuals/codedescs.htm>



# Hints and Tips and Other Good Stuff, cont'd

- ♦ Max time for Discoverer queries = 60 mins; Max number of rows= 100,000
- ♦ Many of the date fields are defined as YYYYMonDD HH:MM – e.g., 2005Jun11 01:22
- ♦ Many date fields are also defined for just the YYYY, or Q, Mon, or DD, or HH, or MM
- ♦ If you can't get a total within Discoverer, you may want to export to a spreadsheet and perform your totals (and other calculations) there.
- ♦ Java is secure with the Verisign Security Certificate updated annually
- ♦ Your browser must allow downloads of signed Active X controls to install the JInitiator (Java Initiator) from Oracle – either by identifying Oracle as a trusted site or prompting. As of 6/11/05, we're using version 1.3.1.18 of the JInitiator. (Use Windows Control Panel to see JInitiator Control Panel)
- ♦ You can change the default directory for exported worksheets
- ♦ Set your defaults to show your conditions and date/time in the title
- ♦ Oracle Technology Network is a good source for information – free registration – look for Discoverer with Data Warehousing and Business Intelligence (<http://www.oracle.com/technology/products/discoverer/index.html>)
- ♦ The next version will always be better . . . Or not.

There's lots to do --  
Discover the data  
with *DISCOVERER!*

